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OPERATIONAL KINDNESS AND OPERATIONAL WIT: PSYCHOSOCIALLY SUPPORTIVE  
ASPECTS OF OPERATIONAL SPACE-TO-GROUND COMMUNICATION

**Abstract**

The calls between astronauts onboard the International Space Station (ISS) and spacecraft communicators on the ground using the space-to-ground radio system, usually have a specific operational purpose. A ground operated experiment could need someone to physically press a button onboard the station, equipment could be malfunctioning, or astronauts could have questions about a written procedure they are following. To effectively meet the purpose behind making those calls, it is an ideal for space-to-ground communication to be clear and concise. In the technical and complex working environment of the ISS, it is of particular importance to know exactly which button to press, or what specifically is unclear in a certain step of a procedure. However, space-to-ground communication also constitutes one of the relatively few interpersonal relationships astronauts have during missions. In addition to serving an operational purpose, this communication can also support astronauts' wellbeing. The purpose of this paper is to identify psychosocially supportive aspects of operational space-to-ground communication between astronauts in space and spacecraft communicators on the ground. Data comes from 189 hours of observation of the publicly available space-to-ground communication loop of the ISS. In the observation period 310 minutes of English language space-to-ground communication took place and these conversations were transcribed to enable analysis. Through qualitative analysis of these authentic mission interactions, the paper identifies two non-operational aspects of communication that are argued could support astronauts' wellbeing. The first is called *operational kindness* and describes operational messages that are characterized by implicitly expressed enjoyment of associating with another person, done for the sake of associating (Simmel, 1911) and not only because of its operational value. The second is called *operational wit* and describes a quality found in operational messages, in which not only the content and clarity of a message, but also the style it is conveyed with, is given attention. Jakobson (1960) describes this as the poetic function of language, in which the same operational message can be expressed in different ways, and in space-to-ground communication some of these ways were found to have a subtle wit and charm to them. Both aspects are illustrated with excerpts from the data and discussed in relation to existing research.